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is independent of the rotorcraft's main emergency lighting system, it—

- (i) Must automatically be activated when the assist means is erected;
- (ii) Must provide the illumination required by paragraph (d)(1); and
- (iii) May not be adversely affected by stowage.
- (e) The energy supply to each emergency lighting unit must provide the required level of illumination for at least 10 minutes at the critical ambient conditions after an emergency landing.
- (f) If storage batteries are used as the energy supply for the emergency lighting system, they may be recharged from the rotorcraft's main electrical power system provided the charging circuit is designed to preclude inadvertent battery discharge into charging circuit faults.

[Amdt. 29-24, 49 FR 44438, Nov. 6, 1984]

§29.813 Emergency exit access.

- (a) Each passageway between passenger compartments, and each passageway leading to Type I and Type II emergency exits, must be—
 - (1) Unobstructed; and
 - (2) At least 20 inches wide.
- (b) For each emergency exit covered by §29.809(f), there must be enough space adjacent to that exit to allow a crewmember to assist in the evacuation of passengers without reducing the unobstructed width of the passageway below that required for that exit.
- (c) There must be access from each aisle to each Type III and Type IV exit, and
- (1) For rotorcraft that have a passenger seating configuration, excluding pilot seats, of 20 or more, the projected opening of the exit provided must not be obstructed by seats, berths, or other protrusions (including seatbacks in any position) for a distance from that exit of not less than the width of the narrowest passenger seat installed on the rotorcraft:
- (2) For rotorcraft that have a passenger seating configuration, excluding pilot seats, of 19 or less, there may be minor obstructions in the region described in paragraph (c)(1) of this section, if there are compensating factors

to maintain the effectiveness of the exit.

[Doc. No. 5084, 29 FR 16150, Dec. 3, 1964, as amended by Amdt. 29–12, 41 FR 55472, Dec. 20, 1976]

§29.815 Main aisle width.

The main passenger aisle width between seats must equal or exceed the values in the following table:

Passenger seating capacity	Minimum main passenger aisle width	
	Less than 25 inches from floor (inches)	25 Inches and more from floor (inches)
10 or less 11 through 19 20 or more	12 12 15	15 20 20

¹A narrower width not less than 9 inches may be approved when substantiated by tests found necessary by the Administrator.

[Doc. No. 5084, 29 FR 16150, Dec. 3, 1964, as amended by Amdt. 29–12, 41 FR 55472, Dec. 20, 1976]

§ 29.831 Ventilation.

- (a) Each passenger and crew compartment must be ventilated, and each crew compartment must have enough fresh air (but not less than 10 cu. ft. per minute per crewmember) to let crewmembers perform their duties without undue discomfort or fatigue.
- (b) Crew and passenger compartment air must be free from harmful or hazardous concentrations of gases or vapors.
- (c) The concentration of carbon monoxide may not exceed one part in 20,000 parts of air during forward flight. If the concentration exceeds this value under other conditions, there must be suitable operating restrictions.
- (d) There must be means to ensure compliance with paragraphs (b) and (c) of this section under any reasonably probable failure of any ventilating, heating, or other system or equipment.

§ 29.833 Heaters.

Each combustion heater must be approved.

FIRE PROTECTION

§ 29.851 Fire extinguishers.

(a) *Hand fire extinguishers*. For hand fire extinguishers the following apply: